

III.—Some Systematic Notes on *Melolonthine Coleoptera*.

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MR. L. PÉRINGUEY, in his "Catalogue of the Coleoptera of S. Africa" (Trans. S. Afr. Phil. Soc. xiii. 1904, p. 174), puts at the head of the genus *Sparrmannia* a species which he calls *vertumnus*, Pall. (with the names *alopez*, F., and *brunnipennis*, Cast., as synonyms), mentioning a typical form with pale testaceous colour as inhabiting the Karroo region, and a form with "light" (apparently meaning dark) chestnut elytra in Namaqualand, Bushmanland, and Damara-land. The recent Catalogue of Dalla Torre adopts this synonymy, but separates as a variety the dark form *brunnipennis*.

Dr. H. Brauns has lately sent a series of this dark form, which he has found in abundance in the Uniondale district of Cape Colony, while the light form is equally abundant in the Willowmore district, only 42 miles to the south, but separated by the range of the Zwartberg running from west to east across the continent. Examination has proved that the two forms are quite distinct, and Fabricius's description shows that it is the dark form which is the true *S. alopez*. It was Fabricius himself who, in his Syst. Eleut. ii. p. 163, identified this insect with the *Scarabæus vertumnus* of Pallas, but with strange carelessness, for the latter is a Russian species, apparently belonging to the genus *Rhizotrogus*.

The light-coloured *Sparrmannia*, described at length by Péringuey, is therefore without a name, and I propose to call it

*Sparrmannia flava*, sp. n.

In addition to the pale-coloured elytra, this species differs from *S. alopez* in their more distinct and regular puncturation, in the longer tarsi of both sexes, and especially in the longer middle tarsi and more dilated hind tibiæ of the male. The ædeagus is figured by Péringuey. That of *S. alopez* is much shorter and blunter. Dr. Brauns states that, while *S. flava* occurs together with *S. alopez* north of the dividing range, he has never seen the latter south of the mountains, and that no specimens of intermediate coloration are found. *S. flava* generally appears at Willowmore towards Christmas time, while *S. alopez* is later, generally appearing in January

and February. Both are nocturnal, and hide in loose soil during the day.

There is another closely similar species, of which specimens are probably included amongst those enumerated by Péringuey, and which I have wrongly determined as *S. vertumnus* in Denkschr. Med. Nat. Gesellsch. xiii. 1903, p. 438. I now call it

*Spirrmanmia similis*, sp. n.

Pallide flava, capite, pronoto, scutello, pectore abdomineque longe et densissime lanatis. *S. flava* valde similis, sed clypeo paulo minus profunde exciso, elytris crebrius sed minus distincte punctatis tarsisque paulo minus elongatis.

Long. 22 mm.; lat. 11.5 mm.

*Hab.* S.W. AFRICA: Hereroland.

This has an extremely close resemblance to *S. flava*, but the elytra are finely and confusedly, instead of strongly and sparingly, punctured, the clypeus is acutely, but less deeply, notched in the middle, and its sides a little less rounded, and the tarsi, or, at least, the middle ones of the male, are not quite so long. The ædeagus of the male is drawn out into a tube just behind the orifice.

Upon p. 287 of his Catalogue already referred to, Mr. Péringuey recognizes two South-African species only of the genus *Asthenopholis*—*subfasciatus*, Blanch., and *crassus*, Arrow; but the species to which he has wrongly applied the latter name is evidently the true *A. adpersus*, Boh. (= *transvaalensis*, Brenske), and in *A. subfasciatus* he has included the quite distinct *A. minor*, Brenske. These four species may be distinguished as follows:—

I. Scutellum well punctured; hind tibia little dilated at the end.

- a. Scales of the upper surface long and hair-like . . . *subfasciatus*, Bl.  
 b. Scales of the upper surface short and broad . . . *minor*, Brenske.

II. Scutellum smooth or almost smooth; hind tibia strongly dilated at the end.

- c. Pronotum moderately covered with long setæ . . . *adpersus*, Bohem.  
 d. Pronotum closely covered with oval scales . . . *crassus*, Arrow.

*A. subfasciatus* seems to be confined to Cape Colony, *A. minor* to Natal, *A. adpersus* to Natal and the Transvaal, whilst *A. crassus* is known only from British East Africa. Brenske's species were determined for me by himself, and Mr. Péringuey has certainly determined them wrongly,

although he has had the assistance of type-specimens. The genitalia of the males are quite different in the three species he has united, notwithstanding his statement.

Mr. Péringuey has founded a genus *Euronycha*, but has not included in his Catalogue the genus *Triodonta*, of which many African species are known; and as the sole character by which he differentiates *Euronycha* (a feature of the male alone) is found in *Triodonta*, they must be considered the same.

The type of *Heterochelus gonager*, F., in the British Museum is the species called by Burmeister *H. longipes*, as Mr. Péringuey has recorded upon my authority (Trans. S. Afr. Phil. Soc. xiii. 1908, p. 698); but the quite different species to which the name *gonager* was applied both by Burmeister and by himself in vol. xii. of the above work remains without any available name. I propose to call it

*Heterochelus melanopygus*, sp. n.

The two following species of South-African Hopliini were described several years ago at Professor Poulton's request, but the descriptions have remained unpublished. The insects were amongst those collected more than a century ago by the African traveller Burchell, and now in the British and Oxford Museums. The data are taken from Burchell's notebooks in Professor Poulton's possession.

*Gouna burchelli*, sp. n.

Rather large, broad, sooty black, naked above, beneath thinly clothed with black hairs and a few white scales at the sides; head broad, rather convex and rugose above, clypeus short, not angulate but bilobed; prothorax rather broader than long, strongly contracted in front, front angles acute, hind angles very obtuse, surface finely punctate, with a faint longitudinal channel; scutellum small, almost semicircular; elytra broad, faintly costate, irregularly and inconspicuously punctured; pygidium (male) large, inturned, transversely punctate-rugose; legs (male) rather long, hind ones slightly thickened, unarmed, front tibiæ tridentate, the innermost tooth rather small and distant, all the claws single and minutely cleft, but those of the hind legs hardly visibly.

Length 9 mm.; greatest breadth 5 mm.

*Locality.* Burchell's two specimens (nos. 318 and 319)

were captured on the morning of Nov. 3, 1814, at Duyker River, in the south of Cape Colony, a little to the west of Mossel Bay.

The type is one of three specimens in the British Museum derived from the Pascoe Collection. There are also four from the Fry Collection and one from the Reiche Collection. All these, as well as the two brought by Burchell, are males, and the other sex remains still unknown. The species was wrongly identified with *Monochelus spinipes*, F., by Reiche, and has a general resemblance to that insect, but its structural characters are not those of *Monochelus*. They agree with those formulated by Mr. Péringuey for his genus *Gouna*, one of those created by the dismemberment of the old *Gymnoloma*. This dismemberment is very unsatisfactory, since by a process of elimination the original genus is left without tangible differential features at all. The present form, however, is nearly related to *Gymnoloma lineolata*, the type of *Gouna*, although much larger and broader. Its comparatively large size and sooty-black surface render it easily recognizable. I at first suspected that the absence of scales from the upper surface might be due to age; but the specimens are in general well preserved, and, as all agree in being smooth on the upper surface, they are evidently in their natural condition.

*Dicranocnemus burchelli*, sp. n.

Fuscous, with the elytra and legs reddish. Rather elongate, the thorax distinctly longer than wide and not gibbous. Clypeus parabolical, the front margin very slightly reflexed and with scarcely visible angles. Upper surface of the head uniformly finely rugose and pubescent. Prothorax moderately convex, the sides regularly rounded and converging forwards. Front angles acute, hind angles obsolete.

♂. Prothorax finely rugose and densely clothed with rather short tawny pubescence, which changes into scales at the posterior margin. The median sulcus is deep behind, but vanishes beyond the middle. The scutellum is clothed with elongate whitish scales and the elytra with round scales varying in colour from chocolate to pale yellow, the light ones forming a median longitudinal stripe which is broadest near the shoulder, a sutural stripe broadest at the apical end, and a quadrate patch between these. The pygidium and propygidium are densely covered with orange scales, with a darker band at the base of the former. The claws of the middle feet are without a basal appendage

Length 5.5 mm.

♀. The prothorax is without a median sulcus. It is not finely rugose, but strongly punctured, and clothed with greyish hair, longer but less dense than that of the male. There are no scales. The elytra are more thinly clothed with decumbent setæ of an almost uniform tawny colour.

Length 4.5 mm.

*Hab.* Burchell's eight specimens, all of which are accounted for, were captured in flowers, five of them at Uitenhage (Nov. 28 and Dec. 1, 1813), and two between Kra Ka Kamma and Van Stade's River (Feb. 7, 1814), near (S.W. of) Uitenhage. Two from each locality are in the British Museum, but there is no means of associating these specimens with their precise data.

Types (♂ and ♀) in British Museum.

The description is based upon nos. 1303 and 1305 in the British Museum. The specimen numbered 1308 is rather smaller and shorter, and may possibly prove to be distinct; but it is most likely only an aberrant individual of the same form.

From the description, this species must be very nearly related to *D. hypocrita*, Péringuey, which has on each elytron two discoidal bands of pale scales coalescing at the middle, whereas only one is present in our form. In the female no pattern is traceable. A male and female of the species were compared by Mr. Guy Marshall and Mr. Péringuey with the Péringuey type at Cape Town and the ♀ (293) named *Heterochelus longipes*, Burm., the ♂ (294) *Dicranocnemus squamosus*, Burm. Both, however, show the form of front tibia distinctive of *Dicranocnemus*, while *D. squamosus* is characterized by a peculiar formation of the middle claws of the ♂ which is absent here. *D. burchelli* is one of the very numerous species of this group of which the sexes are quite dissimilar, so that, in the absence of sufficient evidence, they are frequently associated wrongly. The question has been settled for us in the present instance by Burchell. Four males and four females were taken by him, and of these one of each given to the British Museum were placed on the same pin, showing his conclusion that they belonged to a single species. It will be seen in the above description that, in addition to a difference of shape, the elytra of the male are decorated with orange scales, with a paler sutural patch and longitudinal stripe upon each, while the female is uniformly clothed with grey hair. Hence it is not surprising that, in the absence of direct evidence, they should have been assigned to different species, and even different genera.

Both generic and specific names of Blackburn's *Neolepidiota obscura* are redundant, the insect being a common Indian species, *Holotrichia serrata*, F., of which an old specimen in bad condition and of unknown origin unfortunately fell into Blackburn's hands. It is now in the British Museum.

I believe *Lepidiota bovilli*, Blackb., to be identical with *L. rothei*, Blackb. In spite of a careful comparison of his types, I am quite unable to detect the differences mentioned by him.

#### NEMATOSERICA, gen. nov.

Corpus nonnihil elongatum. Mesosternum haud productum, sat latum. Pedes graciles, tibia antica lata, bidentata, postica modice angusta, fortiter spinosa, tarsorum posticorum articulo primo quam secundum duplo longiori. Ungues profunde fissi, parte interna brevi et lata. Antennæ 10-articulatæ, clava (♂) quadri-articulata, longissima, lamellis æqualibus; (♀) triarticulata. Clypeus vix angustatus, margine antico reflexo, subtiliter sinuato, superficie anteriori haud lato. Oculi haud magni, remoti. Prothoracis latera postice sinuati, angulis posticis acutis. Elytrorum margines postici arcuati, ad suturam depressi.

#### *Nematoserica cærulea*, sp. n.

Cærulea vel viridi-cærulea, sericea, clypeo tibiis tarsisque nitidis, antennis nigris; modice elongata, convexa, capite, corpore subtus pygidioque pallide setosis, elytrorum lateribus fortiter nigrosetosis, clypeo parce punctato, margine valde reflexo, antice subtiliter sinuato; pronoto parvissime punctato, lateribus bisinuatis, angulis posticis acutis, paulo productis, basi utrinque late impresso; elytris fortiter sulcatis, sulcis sat vage punctatis, apicibus separatim arcuatis, parte postica ad suturam depressa, corpore subtus opaco, grosse setoso; pygidio sat fortiter punctato. Long. 5-5.5 mm.; lat. max. 3-3.5 mm.

*Hab.* BORNEO (Sarawak): Puak (*G. E. Bryant*, April, May).

Type in the British Museum.

This beautiful little insect is chiefly remarkable for the length of the 4-jointed antennal club of the male, which is relatively longer than in any other species of *Sericinæ* known to me. The four lamellæ are of equal length—at least five times as long as the foot-stalk—and little shorter than the elytra. The bright blue or greenish-blue colour is also, so far as I know, unique. The upper surface is silky and subopaque, with the clypeus alone shining, the margin of the

latter broadly reflexed, the front margin very gently excised, and a row of stiff bristles traversing the middle from side to side. The eyes are rather small and far apart. The lateral margins of the prothorax are distinctly sinuated in their posterior half, the hind angles a little produced and acute and the base impressed on each side. The elytra are sulcate and the sulci contain rather coarse but shallow punctures.

The genus is apparently related to *Teraserica*, which I do not know, and which has been described from the male alone, the antenna of which has the last four joints rather long but much less elongate than in the present insect. This has not the forehead narrow and the eyes very large and prominent, as in *Teraserica*. The strongly bisinuated sides of the prothorax and acutely produced hind angles are very characteristic, and another peculiarity which, so far as I know, is not found elsewhere is in the shape of the elytra. These are separately rounded at their hinder margins, with the sutural angles extremely blunt, so that a wide angle is formed and a considerable part of the abdomen exposed. The peculiar appearance, however, is chiefly due to the fact that this part of the elytra is strongly depressed along the suture.

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IV.—*Descriptions of New Pyralidæ of the Subfamilies Epipaschianæ, Chrysauginæ, Endotrichinæ, and Pyralinæ, by Sir GEORGE F. HAMPSON, Bart., F.Z.S., &c.*

[Concluded from vol. xviii. p. 373.]

(2 b) *Pyralis nigricilialis*, sp. n.

♂. Head and thorax creamy white tinged with purplish red, especially the tegulæ; antennæ purplish red; abdomen creamy white mixed with purplish red and dorsally banded with black except at base and extremity. Fore wing creamy white mixed with purplish red, the basal area suffused with black except at base of inner margin, the costa black, rather diffused towards apex; antemedial line defining the black area, creamy white slightly defined on outer side by purplish-red and black scales, excurved below costa; the medial part of costa with three white points; a round white spot defined by purplish red at upper angle of cell, another below the lower angle conjoined to a patch of confluent annuli beyond the lower angle, and another annulus on vein 1; postmedial line white defined on each side by purplish red, oblique to discal fold, then slightly waved; cilia black mixed